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Social Comparison at Work:

The Role of Culture, Type of Organization and Gender*

UNE COMPARAISON SOCIALE AU TRAVAIL:

LE RÔLE DE LA CULTURE, LE TYPE D'ORGANISATION ET LE SEXE

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Abstract: The present studyexamined social comparisons among employees in Spain (Study 1) and The Netherlands (Study 2). Especially in Spain, and less so in The Netherlands, we expected differences in social comparison frequency, comparison dimensions (inputs versus outcomes), and comparison targets (men versus women) between employees from public and private organizations as well as between men and women. In Spain, workers in private organizations were found to compare themselves more often than workers in public organizations, and tomore often compare their inputs with others than workers from public organizations. In contrast,workers from public organizations, and especially women, compared their outcomes more often with others. Especially women in private organizations compared themselves with women as well as with men.In The Netherlands such differences were absent, or less pronounced. The results suggest that social comparisons are significantly affected by national culture, type of organization and gender.
Key words: Social Comparison; Organizations; Gender, Culture

Résumé: Dans la présente étude nous avons examiné les comparaisons sociales entre des employés en Espagne (Etude 1) et aux Pays-Bas (Etude 2). Nous nous attendions à des différences dans la fréquence des comparaisons sociales, dans les dimensions de comparaison (effort versus résultats) et dans les objectifs des comparaisons (hommes versus femmes) entre les employés d'organisations publiques et privées ainsi qu'entre les hommes et les femmes. Il s'est trouvé qu'en Espagne, les employés des organisations privées faisaient des comparaisons plus fréquentes que les employés des organisations publiques. En plus, ils comparaient leurs efforts plus souvent que les employés des organisations privés. En revanche, les employés des organisations publiques, et particulièrement les

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femmes, comparaient leurs résultats plus souvent avec ceux d'autres personnes. Surtout les femmes travaillant dans des organisations privées se comparaient avec des femmes aussi bien qu'avec des hommes. Aux Pays-Bas, ces différences étaient absentes ou beaucoup moins prononcées. Les résultats montrent que les comparaisons sociales sont significativement influencées par culture nationale, type d'organisation et sexe.

Mots-clés: Comparaison Sociale; Organisations; Sexe; Culture

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When individual state that they are, for instance, successful, competent or ambitious, they are making evaluations in relation to some type of standard. Such a standard is often based on what one perceives in other individuals, i.e. on what is referred to as a process of *social comparison*. In general, individuals may compare themselves with family, friends, or colleagues on many distinct dimensions, varying from intelligence to attractiveness, from salary to career opportunities, and from health status to life expectancy. The concept of social comparison refers to relating one's own characteristics to those of other similar individuals (Buunk & Gibbons, 1997; Festinger, 1954; Wood, 1989). Social comparisons may provide individuals with information that they can use to evaluate, enhance or improve themselves (e.g., Taylor & Lobel, 1989). Over the past decades, numerous studies have testified to the importance of social comparison processes, showing that these processes may have a substantial impact on individuals' way of thinking, feeling, behaving, and on their sense of self (for a review, see Buunk & Gibbons, 2007).

Social comparison processes may be especially manifest in work situations in which achieving success is important for one's self-esteem, and a poor performance may hurt one's sense of self. Indeed, the work sphere is a major area of life in which people may attain prestige, recognition, and self-esteem. Because the subjective assessment of such features is to an important extent based upon comparisons with others, employees frequently engage in comparisons with their coworkers to evaluate themselves (e.g., Buunk & Ybema, 1997; Goodman, 1977). Remarkably, despite the apparent importance of social comparison processes in organizations, there is relatively little research on social comparison in work settings. In the present research we therefore examined three relevant aspects of social comparison within organizations: the preferred direction of social comparison, the dimension on which social comparison occurs, and the gender of the person individuals compare themselves with.

DIRECTION OF COMPARISON

The first aspect we examined was the direction of social comparison. From the onset of social comparison research, the preferred direction of comparison has been a central theoretical issue. In his original paper, Festinger (1954) made a strong case of the *upward drive*, and suggested that individuals would have a persistent tendency to engage in comparisons with others who were slightly better than themselves. While this tendency was indeed documented in an early series of experimental studies (e.g., Miller & Suls, 1977; Gruder, 1977), other researchers later suggested that individuals may also engage in other types of social comparison. Current social comparison research underlines that, when comparing themselves, individuals may do so with others who are similar (lateral comparisons), better (upward comparisons), or worse (downward comparisons). With whom individuals choose to compare themselves has important consequences and depends largely on the motive underlying the comparison. When self-evaluation is the dominant motive, in general, individuals will compare themselves with others whose performance is similar to that of themselves ('the similarity hypothesis'; Festinger, 1954; Suls & Wheeler, 2000) because, when others' abilities are too far from one's own, either above or below, it is not possible to estimate one's own ability or opinion accurately. When self-improvement is the dominant motive, in general, individuals will compare themselves upwards, with others who perform better than they do (e.g., Buunk, Cohen-Schotanus, & Van Nek, 2007; Suls & Wheeler, 2000; Wood, 1989). Observing another person who has proficiency at a task can reveal information about how to improve, and may raise individuals' feelings of self-confidence and self-efficacy (e.g. Blanton, Buunk, Gibbons & Kuyper, 1999). Finally, when self-enhancement is the dominant motive, individuals generally prefer to compare themselves downwards, with others who are worse off as themselves (e.g., Buunk et al., 2007; Taylor & Lobel, 1989; Wills, 1981). Perceiving one-self as better off boosts self-esteem, reduces anxiety and generates the positive affect essential for self-enhancement. In contrast, seeing someone who is better off may deflate the ego and produce negative affect. Within organizations, however, little research exists on the preferred direction of comparison. Recently, Eddleston (2009) showed that male and female managers compared themselves somewhat more upwards than downwards when evaluating their career progress. In a similar vein, Buunk, Zurriaga, Peiro, Nauta and Gozalvez (2005) found physicians to engage more often in upward comparisons than in downward comparisons with colleagues. The aim of the present study was to extend these findings, by examining the preferred direction of comparison among workers in both public and private organizations.

DIMENSION OF COMPARISON

The second aspect of social comparison we examined was the dimension of social comparison. Individuals may compare themselves at work on many different dimensions – their salary, for instance, but also their efforts, performance and career opportunities. In the present study, we based ourselves on Tornow's (1971) conceptualization. According to Tornow work dimensions may be described as 'inputs', that is, as factors that individuals believe to make a contribution to the job, e.g., work effort and performance, and 'outcomes' described as factors that individuals believe that derive from the situation and are perceived as worthy, e.g., salary and career opportunities. In line with the work by Tornow (1971), we felt that it was important, from a theoretical as well as from a practical point of view, to know whether individuals in organizations in particular, compare themselves with others mainly with respect to their inputs or with respect to their outcomes. Previous studies on social comparisons among workers often focused on comparisons on a single dimension only, in particular on wage comparisons (e.g., Harris, Anseel, & Lievens, 2008; Sweeney & McFarlin, 2005). In contrast, the present study aimed to take a more holistic view by studying social comparisons on several work-related dimensions, reflecting both inputs and outputs.

GENDER

The third aspect of social comparison we aimed to examine was workers' target choice in terms of gender. How often do employees compare themselves to colleagues of the same sex respectively the opposite sex? According to social comparison theory, individuals prefer to compare themselves with others who are similar to themselves. Gender is one of the attributes for which similarity has been found to be relevant: several studies have shown that individuals prefer to compare themselves with individuals of the same sex (e.g., Blanton et al., 1999; Miller, 1984). However, deviant findings have been reported as well. For instance, Steil and Hay (1997) asked professional women with whom they compared on how they fared in regard to promotion, compensation, responsibility, and influence in decision making. While about forty percent of women compared themselves with both sexes, nearly as many women compared themselves mainly with other women as with other men (29% and 24%). According to these authors, for high-achieving women social comparisons with men may still provide the most useful information on the route to the top. However, the preferred comparison target in terms of gender, has been rarely examined within organizations. In addition to examining the preferred direction of comparison and the dimensions workers compare themselves on, the present study therefore also examined the sex of the comparison target workers prefer to compare themselves with. The central assumption in the present research was that the direction and dimensions of social comparison and the preferred comparison target in terms of sex would be affected by two factors, i.e., the type of organization (private versus public) in which employees are employed work for and their gender.

DIFFERENCES BETWEEN PRIVATE AND PUBLIC ORGANIZATIONS

We assumed that organizational context will affect social comparison processes, in particular whether an organization is located in the private or public sector (Rawls, Ulrich, & Nelson, 1975; Solomon, 1986). Walmsley and Zald (1973) noted that the main differences between private and public organizations are due to the different patterns in ownership and funding. That is, organizations in the private sector operate in a competitive and dynamic environment, in which profitability is the ultimate criterion of success; they are responsive to the market and to customer demands. In the public sector, organizations are more focused on maintaining constituencies, seeking multiple and cooperative goals, and obtaining funding through a process which is susceptible to political influences (Porter & Van Maanen, 1970; Solomon, 1986). Given such differences, we assumed that, much more so than in public organizations, qualities such as competition, autonomy, individual achievements and self-attributes are appreciated.

According to social comparison theory, individuals will especially be inclined to compare themselves when they experience uncertainty or stress (Buunk, 1994; Festinger, 1954). In general, in the private sector employees experience significantly more job stress than in the public sector (e.g., Mohanty & Mishra, 1998). In addition, it is usually assumed that competition breeds social comparison and vice versa (Garcia & Tor, 2007; Garcia, Tor & Gonzalez, 2006). In a competitive context workers may use downward comparisons to enhance their sense of selves and to demonstrate that they are superior. In addition to this motive of self-enhancement, in a competitive context, often also the motive of self-improvement will be salient. Workers may look upward for inspiration (e.g. Lockwood & Kunda, 1997) and use the information provided by upward comparisons to improve their performances. As a consequence, we expected workers in private organizations to compare themselves more often with others than workers in public organizations, both downward and upward (Hypothesis 1).

In addition, in public organizations, job outcomes such as a stable income and the option to work part-time are highly valued. Mauno, Kinnunen, and Piitulainen (2005), for instance, showed that public organizations have a much more favorable work-family culture than private organizations. Because of the high value attached to job outcomes, we expected employees in public organizations to compare themselves more often on their job outcomes than employees in private organizations. In contrast, the climate in private organizations will in general be more competitive than in public organizations, enhancing the focus on what others contribute to the organization in comparison to oneself. Nowlin (1982), for instance, found that, although managers in both types of organizations felt that responsibility was an important motivating part of their job, managers in private organizations found it even more important. Thus, we expected that workers from private organizations will compare their inputs more often with others than workers from public organizations whereas workers from public organizations will compare their outcomes more often with others than workers from private organizations (Hypothesis 2).

GENDER DIFFERENCES

In addition to differences in organizational context, we assumed that social comparison processes in organizations will be affected by employees' gender. We expected women to compare themselves more often than men, both upward and downward (Hypothesis 3). There is some evidence that social comparisons may be overall somewhat more frequent among women (Gibbons & Buunk, 1999). Moreover, individuals will especially be inclined to compare themselves when they experience uncertainty or stress (Festinger, 1954). Women have only recently entered the labor force and often suffer from gender inequalities. Still today, women are paid less for the same job as men (Joshi, Makepeace, & Dolton, 2007), have lower probabilities of promotion (Blau & Devardo, 2007) and more often have temporary work contracts (Menéndez, Benach, Muntaner, Amable, & O'Campo, 2007). Inequalities such as these may create relatively high job stress among women (e.g., Menéndez et al., 2007) and, as a consequence, lead women to socially compare themselves more often than men.

In addition, in general, men and women seem to value different aspects of their work. Several studies suggest that women tend to place greater emphasis on specific job outcomes, such as the amount of vacation time (Maume, 2006), income (Amabile, Hill, Hennessey, & Tighe, 1994; Singh, 1994), working conditions (Bennett, Stadt, & Karmos, 1997) and the option to work part-time (Dæhlen, 2007). In contrast, men have been found to place greater emphasis on aspects related to inputs, such as the opportunity to use their talents or skills (Amabile et al., 1994; Centers & Bugental, 1966). As a consequence, we expected men to compare their inputs more often than women and women to compare their outcomes more often than men (Hypothesis 4).

Finally, in line with social comparison theory, we expected that workers will prefer to compare themselves with same-sex others. According to Festinger's (1954) similarity-hypothesis social comparisons with same-sex individuals will provide workers with most useful information about their own performances. As a consequence, we expected women to compare themselves more often with women than men and men to compare themselves more often with men than with women (Hypothesis 5). Two studies were conducted to test these hypotheses, one in Spain (Study 1) and one in The Netherlands (Study 2).

STUDY 1

METHOD

Procedure and Participants

Study 1 was conducted in Spain. Two hundred and twenty six workers from private organizations (45%) and public organizations (55%) participated voluntarily in the study. The private organization was from the automobile sector, whereas the public organizations were 10 public libraries. In the private organizations the sample consisted of 101 workers (75% men and 25% women); in the public organizations the sample consisted of 125 workers (% 25 men and 75% women). In the Spanish sample, 0.5% was younger than 21 years, 28% was between 21-36, 59% was between 37-55, and 13% was older than 55 years old. Overall, the access to the organizations that participated in the survey was arranged by their respective human resources divisions. All the employees completed the survey administered by a researcher and without the presence of managerial personnel. Workers filled in a pencil and paper questionnaire. Employees were told that the questionnaires would be kept completely anonymous and that the management would not be able to identify the individual respondents.

MEASURES

Social comparison direction. To assess the frequency with which individuals engaged in upward and downward comparisons, we used two-items that have been used in previous research (Buunk, Zurriaga, González-Romá, & Subirats, 2003), i.e., "How often do you compare yourself with others who are performing better than you are?", and "How often do you compare yourself with others who are performing worse than you are?". Responses were provided on 5-point scales, with points labelled never (1), seldom (2), sometimes (3), regularly (4), and often (5).

Work dimension comparisons. To measure the frequency with which individuals compared themselves with others on specific work-content dimensions, seven questions were formulated. More specifically, participants were asked: "How often do you compare your (salary, work conditions, career opportunities, performance, social skills, work effort and capacities) with other colleagues?". According to Tornow's classification, (1971), these items are grouped in two factors, Inputs from the employees, and Outputs from the organization. An exploratory principal component analyses were conducted on the 7 items, and two factors were extracted in these analyses, one with an eigenvalue of 3.93 and the other with an eigenvalue of 1.06; these factors explained 56% and 15% of the variance, respectively. A Varimax rotation was then performed. The first factor, comprising four items (performance, social skills, capacities, and work effort), clearly referred to Inputs, and a scale based on these items had a Cronbach's alpha of .86. The second factor, comprising three items (salary, career opportunities and work conditions), clearly referred to Outcomes, and a scale based on these items had a Cronbach's alpha of .80. Thus, the items could be grouped in the two factors that we expected on theoretical grounds.

Target choice comparison. To measure the frequency with which individuals compare themselves with men and women, two questions were formulated: "How often do you compare yourself with men?" and "How often do you compare yourself with women?". A 5-point scale was used, with points labelled (1) "never" to (5) "often".

RESULTS

To test the hypotheses, we performed Univariate Analyses of Variance (ANOVA) to examine the effects of type of organization and gender on the social comparison measures.

Frequency of Social Comparisons

To test Hypothesis 1, the prediction that workers in private organizations would compare themselves more often with others than workers in public organizations, an ANOVA, using Participant Sex and Type of Organization as independent variables was conducted on the total frequency of social comparisons (the sum of the upward and downward frequency items). A significant main effect of Type of Organization emerged, $F(1,193) = 7.36$, $p < .01$. Consistent with Hypothesis 1 workers in private organizations ($M = 5.06$) made more social comparisons than workers in public organizations ($M = 4.52$). No other effects reached significance (F's < 2.98, *ns*). The lack of a significant main effect of Participant Sex and a significant interaction effect between indicates that Hypothesis 3, the expectation that women would compare themselves more often than men, was not supported.

Next, to more closely examine the type of social comparisons workers in public and private organizations engaged in, separate analyses were conducted using the frequency of downward comparisons respectively the frequency of upward comparisons as a dependent variable.

Downward comparison. An ANOVA, using Participant Sex and Type of Organization as independent variables and the frequency of downward comparisons as a dependent variable yielded a significant main effect of Type of Organization, $F(1,206) = 6.25$, $p < .05$). Consistent with Hypothesis 1 workers in private organizations more often engaged in downward comparisons than workers in public organizations ($M = 2.47$ vs $M = 2.20$). No other effects were significant (F's < 1.56, ns).

Upward comparison. A similar ANOVA on the frequency of upward comparisons yielded a significant main effect of Type of Organization, $F(1,203) = 6.92$, $p < .001$). Consistent with Hypothesis 1 workers in private organizations more often engaged in upward comparisons than workers in public organizations ($M = 2.62$ vs $M = 2.35$). No other effects were significant (F's < 1.99, *ns*).

Work Dimension Comparison.

Inputs. An ANOVA using Participant Sex and Type of Organization as independent variables and the inputs dimension as the dependent variable revealed a significant main effect of Type of Organization, $F(1,217) = 6.15$, $p < .05$). Consistent with Hypothesis 2, workers from private organizations more often compared themselves with others on the inputs dimension than workers from public organizations ($M = 11.0$ vs $M = 10.1$). No other effects reached significance (F's <

2.03, *ns*). The lack of a significant main effect of Participant Sex indicated that part of Hypothesis 4 was not supported: men did not compare their inputs more often than women.

Outcomes. A similar ANOVA on the outputs dimension revealed significant main effects of Type of Organization [$F(1, 219) = 4.28$, $p < .05$] and Participant Sex [$F(1,219) = 4.37$, $p < .05$] that were qualified by an interaction effect between both variables [$F(1,219) = 9.89$, $p < .01$]. Figure 1 shows that whereas in private organizations woman compared their outcomes more often than men ($M = 10.5$ vs $M = 8.38$; $t = 3.41$, $p = .001$), in public organizations men and women did not differ in the frequency to which they compared their outcomes ($M = 8.77$ vs $M = 8.35$; $t = .81$, *ns*). Note that especially women in private organizations compared their outcomes with those of others (see Figure 1). In sum, consistent with Hypothesis 4, women, although only those in private organizations, compared their outcomes more often with others than men did. Our findings do not support Hypothesis 2: workers in public organizations did not compare themselves more often with others on the outputs dimension than workers in private organizations.

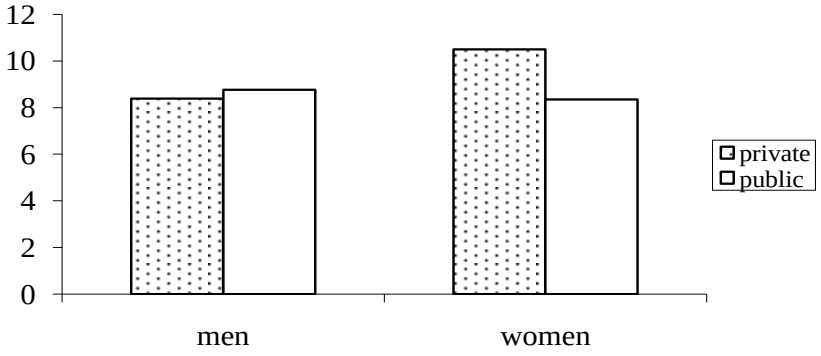

Figure 1: Frequency of Comparison on the Outcomes Dimension as a Function of Employee' Sex and Type of Organization.

Target Choice Comparison.

Comparison with women. An ANOVA using Participant Sex and Type of Organization as independent variables and the frequency with which workers compared themselves with women as the dependent variable revealed significant main effects of Participant Sex [$F(1,217) = 9.90$, $p < .01$] and Type of Organization [$F(1,217)$, 12.78, $p < .001$], that were qualified by an interaction between both variables [$F(1,217) = 4.78$, $p < .05$]. Figure 2 shows that especially women in private organizations compared themselves with women ($M = 2.74$), significantly more so than did their male colleagues ($M = 1.97$), women in public organizations ($M = 1.91$) and men in public organizations ($M = 1.77$, t's > 3.50, p < .01). Men and women in public organizations did not differ significantly from each other in the frequency with which they compared themselves with women ($t = .75$, *ns*). In sum, consistent with Hypothesis 5, women, although only those in private organizations, compared themselves more often with women than men did.

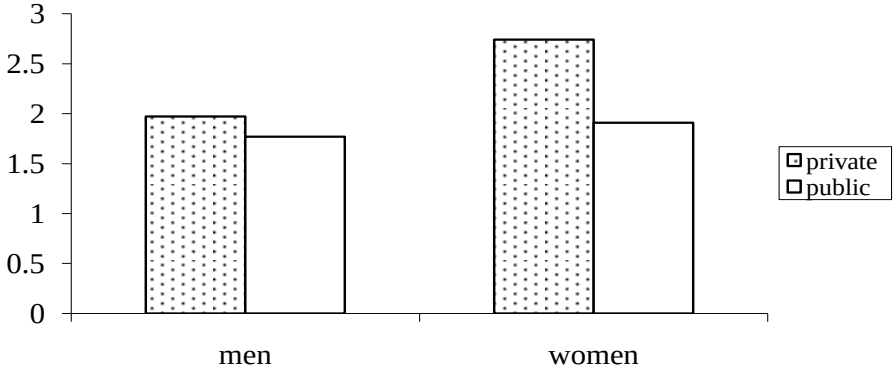

Figure 2: Frequency of Comparison with Women as a Function of Employee' Sex and Type of Organization.

Comparison with men. A similar ANOVA on the frequency with which workers compared themselves with men yielded a significant main effect of Organizational Type, $F(1,219) = 10.42$, $p < .01$. That is, workers in private organizations compared themselves more often with men than workers in public organizations did ($M = 2.23$ vs $M = 1.87$). In addition, a significant interaction effect between Participant Sex and Type of Organization emerged, $F(1,217) = 4.78$, $p < .05$. Figure 3 shows that, in private organizations, women compared themselves more often with men than men did ($M = 2.63$ vs $M = 2.11$, $t = 2.39$, $p < .01$), whereas in public organizations men and women did not differ in the frequency with which they compared themselves with men ($M = 1.85$ vs $M = 1.94$, $t = .45$, *ns*). In sum, these findings do not support Hypothesis 5: men did not compare themselves more often with men than women did. Instead, in private organizations women compared themselves more often with men than men did.

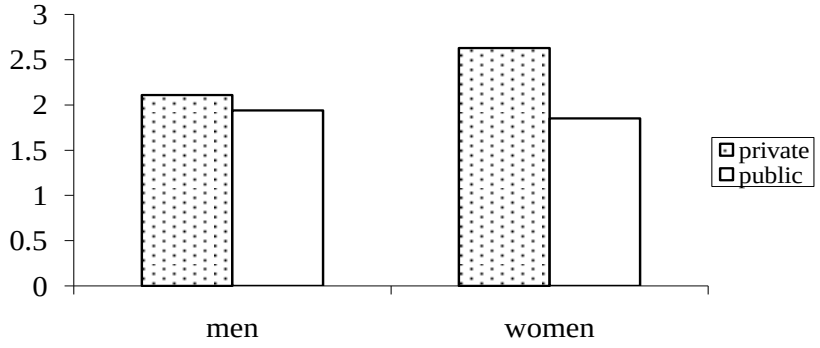

Figure 3: Frequency of Comparison with Men as a Function of Employee' Sex and Type of Organization.

DISCUSSION OF STUDY 1

Although not all of our hypotheses were supported, Study 1 revealed several interesting results. First, the type of organization workers were employed in had a number of consistent effects. Probably due to higher levels of competitiveness and job stress (Garcia & Tor, 2007; Garcia, Tor & Gonzalez, 2006), as expected, workers in private organizations made more social comparisons than workers in public organizations did, both more downward and more upward comparisons. Also as expected, workers from private organizations more often compared themselves with others on the inputs dimension than workers from public organizations did. However, in contrast to what we expected, we did not find workers from public organizations to compare their outcomes more often with others than workers in private organizations. A possible explanation is that for employees in public organizations obtaining a stable income and job position is no longer an important motivation than for employees in private organizations. Instead, in both private and public organizations job outcomes may have become about equally important. Barnum, Liden, and DiTomaso (1995), for instance, found both public and private organizations to have a well-structured promotional, pay, and governance systems, regulated by union contracts. Alternatively, it is possible that employees in private and public organizations attach similar value to job outcomes in general, but differ in the aspects of job outcomes they find most important. For instance, whereas employees in the private sector may especially value a *high* salary, employees in the public sector may especially value a *stable* salary.

In addition, several interesting sex differences emerged. That is women compared their outcomes more often with others than men did, but only in private organizations. A possible explanation is that gender differences in work values are more pronounced in private organizations than in public organizations. Values related to inputs, such as being challenged to perform at one's best and making an effort, seem to be more closely connected to the competitive culture of private organizations whereas outcome related values, such as a stable income, may be satisfied about equally well in both public and private organizations. As a consequence, men who highly value a job's inputs will prefer working in private organizations, whereas women, who, in general, place relatively high value on job related outcomes (i.e., Amabile et al., 1994; Singh, 1994), may not show this preference. As a consequence, private organizations may employ relatively many men who value inputs and who, as a consequence, will compare their inputs relatively often with others.

In addition, although we did not find women to compare themselves more often in general, as we hypothesized, we found that, in private organizations, women, relative to men, compared themselves more often with both men and women. Thus, women do not seem to compare themselves more frequently per se, but only when they work in the assumedly more competitive setting of a private organization. A possible explanation is that, in private organizations, less of an attempt is made to decrease the gender gap in, for instance, wages and managerial positions (e.g., Gornick & Jacobs, 1998;

Mano-Negrin, 2004). As a result, in private organizations female employees often have to deal with more gender inequality and job stress (e.g., Gornick & Jacobs, 1998; Mano-Negrin, 2004). In addition, relatively few women hold managerial positions in private organizations (Burress & Zucca, 2004). As a result, high-achieving women in private organizations who seek a role model to compare themselves with will not only compare themselves with women but also with men. The relatively large gender difference in managerial positions and wages in private organizations may also account for our finding that workers – both men and women - in private organizations compared themselves more often with men than workers in public organizations did. Because of the lack of female executives, workers in private organizations are relatively limited in their choice of comparison target in terms of gender. That is, when they seek an upward comparison target for reasons of self-improvement, they are simply forced to compare themselves with men. By showing that, in public organizations, women do no compare themselves more often than men with men nor women, our findings may indicate that in public organizations the genders may no longer treated unequally and that women in such organizations no longer experience more job stress as a consequence.

STUDY 2

Study 2 was conducted in The Netherlands and, as Study 1, aimed to test Hypotheses 1 to 5. However, based on cultural differences between The Netherlands and Spain, we expected to find relatively small differences between men and women. According to Hofstede (1980) national cultures can be rated on four cultural dimensions: Masculinity, Individualism, Uncertainty Avoidance, and Power Distance. Van Oudenhoven (2001) has shown that organizations reliably reflect these dimensions of national cultural values. In addition, several studies have found these cultural dimensions to affect social comparison processes. For instance, Sedikides, Gaertner, and Vevea (2005) found Westerners and Easterners to differ in the traits on which they compared themselves with others. Whereas Westerners compared themselves with others relatively often on attributes relevant to the Western cultural ideal of individualism, such as independence and attractiveness, Easterners did so on attributes relevant to the Eastern cultural ideal of collectivism, such as cooperation and consideration.

One of the cultural dimensions we expected to affect workers' social comparison processes is Masculinity. In a masculine society social gender roles are very distinct: men are supposed to be assertive, tough, and focused on material success; women are supposed to be more modest, tender, and concerned with the quality of life. In contrast, in feminine cultures gender roles show more overlap: both men and women are supposed to some extent to be modest, tender, and concerned with the quality of life (e.g. Hofstede, 2000). On Hofstede and Hofstede (2007)'s Maculinity Index of 74 countries The Netherlands is ranked number 72, and therefore can be considered an extremely feminine culture. Spain, in contrast, ranks number 52, a rank number that reflects a more masculine culture (Hofstede & Hofstede, 2007). As in other aspects of their social life, we expected that, in a feminine culture such as The Netherlands, the genders would differ relatively weakly in their social comparisons. Thus, we expected to find relatively small differences between Dutch men and women's social comparison tendencies.

METHOD

Procedure and Participants

One hundred and eighty two workers from private organizations (41%) and public organizations (59%) participated voluntarily in the study. The Dutch private organization was from the appliance sector whereas the public organizations were three public libraries. In the private organizations the sample consisted of 74 workers (62% men and 28% women); in the public organizations the sample consisted of 108 workers (12% men and 88% women). In the Dutch sample, 0.5% was younger than 21 years, 24% was between 21-36, 66% was between 37-55, and 11% was older than 55 years old. Overall, the access to the organizations that participated in the survey was arranged by their respective human resources divisions. All the employees completed the survey administered by a researcher and without the presence of managerial personnel. Workers in the Dutch public organization filled in a pencil and paper questionnaire. The Dutch private organization was only willing to participate in the study when the questionnaire was made available online. Therefore, workers in the Dutch company filled in an online questionnaire. Employees were told that the questionnaires would be kept completely anonymous and that the management would not be able to identify the individual respondents.

MEASURES

In order to assess the frequency of upward and downward social comparison, the frequency of comparisons on the outputs and inputs dimensions, and the frequency of comparisons with men and women, the same measures were used as in Study

1. As in Study 1, an exploratory factor analysis was conducted on the seven work dimensions that assessed job output and inputs. Two factors were extracted in these analyses, one with an eigenvalue of 3.89 and the other with an eigenvalue of 1.06; these factors explained 56% and 15 % of the variance, respectively. A Varimax rotation was then performed. The first factor, comprising four items (performance, social skills, capacities, and work effort), clearly referred to Inputs, and a scale based on these items had a Cronbach's alpha of .85. The second factor, comprising three items (salary, career opportunities and work conditions), clearly referred to Outcomes, and a scale based on these items had a Cronbach's alpha of .77. Thus, like in Study 1, the items could be grouped in the two factors that we expected on theoretical grounds.

RESULTS

To test the hypotheses, we performed Univariate Analyses of Variance (ANOVA) to examine the effects of type of organization and gender on the social comparison measures.

Total Frequency of Social Comparisons

An ANOVA was conducted on the total frequency of social comparisons (the sum of the upward and downward frequency items). No significant effects emerged (F's < 2.28, *ns).* As a consequence, Hypothesis 1, the expectation that workers in private organizations would make more social comparisons than workers in public organizations could not be confirmed neither could Hypothesis 3, the expectation that women would compare themselves with others more often than men.

Downward comparison. An ANOVA was conducted on the frequency of downward comparisons using Participant Sex and Type of Organization as independent variables. No significant effects emerged (F's < 1.14, *ns*).

Upward comparison. A similar ANOVA on the frequency of upward comparisons neither generated significant effects (F's < 2.35, *ns*).

Work Dimension Comparison

Inputs. An ANOVA using Participant Sex and Type of Organization as independent variables and the inputs dimension as the dependent variable did not reveal significant effects (F's < 2.29, *ns*). As a consequence, neither Hypothesis 2, the prediction that workers in private organizations would more often compare their inputs than workers in public organizations, nor Hypothesis 4, the prediction that men would more often compare their inputs than women, could be confirmed.

Outputs. A similar ANOVA on the outputs dimension did not reveal any significant effects (F's < 1.49, *ns*). As a consequence, neither Hypothesis 2, the prediction that

workers in public organizations would more often compare their outputs than workers in private organizations, nor Hypothesis 4, the prediction that women would compare their outcomes more often than men, could be confirmed.

Target Choice Comparison

Comparison with women. An ANOVA using Participant Sex and Type of Organization as independent variables and the frequency with which workers compared themselves with women as the dependent variable did not reveal any significant effects (F's < 2.50, *ns*). As a consequence, Hypothesis 5, the prediction that women would compare themselves more often to women than men, could not be confirmed.

Comparison with men. A similar ANOVA on the frequency with which workers compared themselves with men yielded a marginally significant main effect of Participant Sex (F = 2.67, p = .10). Consistent with Hypothesis 5, men tended to compare themselves more often with men than women did (M = 2.24, vs M = 1,97). The ANOVA also revealed a marginally significant main effect of Type of Organization (F = 2.91, p < .10). That is, workers in private organizations tended to compare themselves more often with men than workers in public organizations did (M = 2.23 vs M = 1.78).

DISCUSSION OF STUDY 2

Among Dutch workers we hardly found any effects of organizational type and gender on their social comparisons. Although we expected to find fewer gender differences, we did not expect organizational type to have a weaker influence as well. A possible explanation for the lack of findings in the Dutch sample is the strong individualistic nature of Dutch society. Individualistic cultures are characterized by a responsibility for one's own behaviors, personal freedom and autonomy. In contrast, in collectivistic cultures people are considered responsible for behaviors of the groups (families) to which they belong and social networks and family reputations are highly valued. Hofstede and Hofstede (2007) rank

ordered 74 countries on the Individualism dimension among which The Netherlands and Spain. The Netherlands ranked number 5 on this list, and therefore can be considered an extremely individualistic culture. Spain, in contrast, ranked number 46, a rank number that reflects a much more collectivistic culture. Relative to people in individualistic cultures, in collectivistic cultures such as Spain individuals have been found to much more interdependent self-concepts, i.e. self-concepts that are defined in terms of one's relationship with others (Carpenter, 2000). As a result, because of the relatively high importance of others to the self-concept, relative to Dutch workers, Spanish workers may be much more interested in their relative standing in the group and, as a consequence, more interested to compare themselves with others. Evidence for this assumption was found by Chung and Mallery (1999) who revealed that higher individualism scores were associated with a decreased desire to compare oneself (see also Gibbons & Buunk, 1999). In a similar vein, White and Lehman (2005) found that European Canadians (a more individualistic subculture) less frequently engaged in upward social comparisons than Asian Canadians (a more collectivistic subculture). More in general, because of their relatively 'outward' perspective, it is possible that social comparisons of individuals from collectivistic cultures are more strongly evoked by external factors, whereas in individuals from relatively individualistic cultures social comparisons are more strongly evoked by internal factors, e.g., their personalities.

Nonetheless, one of Study 1's finding was replicated: as in Spain, in The Netherlands workers in private organizations tended to compare themselves more often with men than workers in public organizations. A likely explanation is that in The Netherlands, despite men and women's relatively equal gender roles, male managers still outnumber female ones, especially in the private sector. Whereas in the Dutch public sector 36% of the managers is female, in the Dutch private sector only 12% is (Portegijs, Hermans, & Lalta, 2006). As a consequence, when seeking a role model to compare themselves upward with, workers, especially those in private organizations, are often forced to compare themselves with men.

GENERAL DISCUSSION

The present research examined the effects of type of organization and gender on three specific aspects of social comparison, i.e. the direction and dimension of social comparison and the choice of the comparison target. To test our hypotheses we conducted two studies, one in Spain and one in The Netherlands. However, in these samples we found very different results. Whereas in Spain workers' social comparison tendencies were affected by gender and the type of organization they participated in, in The Netherlands this was hardly the case. We explained this difference by referring to the cultural difference between Spain and The Netherlands in terms of individualism-collectivism and masculinity-femininity.

It must be emphasized that, in our research, we can not completely separate the effects of organization type and gender because there were more women in the public organizations and more men in the private organizations. This is by definition a difficult issue in survey research because, of course, we cannot assign individuals randomly to organizations, and selection effects are likely due to which men choose more for private and women more for public organizations. Nevertheless, because we included gender in all analyses, the effects of organization type are to some extent controlled for gender. In developed welfare states such as Spain and The Netherlands, much more men than women occupy managerial positions (Mandel & Semyonov, 2006). As a consequence, many men and women who compare upwards for reasons of self-improvement necessarily have to compare themselves with a male target. A further complicating factor is that this may be different for Spain and The Netherlands. Whereas The Netherlands ranks 6 on the Gender Empowerment Measure (GEM) of the United Nations - that assesses gender inequalities in areas of economic and political participation, decision making and earned income - Spain ranks 12 (UN, 2007/2008). Another limitation of the present study was that most of our variables were assessed by means of 1-item scales. More reliable results might have been obtained when scales would have consisted of multiple items.

Nonetheless, our results show that social comparison processes depend strongly on workers' gender, the country he/she lives in and the type of organization he/she works in. For several reasons, this knowledge is highly relevant and may have several theoretical and practical implications. On a theoretical level, our study, for instance, shows that social comparison process are partially shaped by culture and type of organization and that results found in one type of organization or culture cannot be generalized automatically from one organization aor culture to the other. Although many studies have been conducted on the role of social comparison and job-related variables such as burnout, job satisfaction and perceptions of justice, none of these have explicitly studied these variables in different countries. The present study strongly suggests that this is, however, a worth wile and important undertaking. Our study also has several practical implications. Our results, for instance, suggest that modelling interventions aimed at inspiring employees to perform at their best, e.g., the election of an "employee of the month", will be much effective in Spain than in The Netherlands. In addition, several studies have shown that, although upward social comparisons may provide workers with inspiration and information how to improve their performances, they also may play an important role in the cause and maintenance of

burnout (Halbelseben & Buckley, 2006; Michinov, 2005), low job satisfaction and low affective commitment to the organization (Brown, Ferris, Heller, & Keeping, 2007). Our study therefpre suggests that especially Spanish workers are relatively vulnerable to develop feelings of burnout. It is important for both workers, organizations and psychologists to know more about the double-edged sword of social comparisons and to identify those workers who are most vulnerable for developing work-related psychological distress. The present study may help to accomplish this goal.

REFERENCES

Amabile, T.M., Hill, K.G., Hennessey, B.A., & Tighe, E.M. (1994). The Work Preference Inventory: Assessing intrinsic and extrinsic motivational orientations. *Journal of Personality and Social Psychology, 66(5),* 950-967.

Barnum, P., Liden, R.C., & DiTomaso, N. (1995). Double jepaordy for women and minorities: Pay differences with age. *Academy of Management Journal, 38(3),* 863-880.

Bennett, W., Stadt, R., & Karmos, J. (1997). Values preferences by gender for nontraditional college students between 1992 and 1982. *Counseling and Values, 41(3),* 246-252.

Blanton, H., Buunk, B.P., Gibbons, F.X., & Kuyper, H. (1999). When better-than-others compare upwards: Choice of comparison and comparison evaluation as independent predictors of academic performance. *Journal of Personality and Social Psychology, 76(3),* 420-430.

Blau, F.D., & Devardo, J. (2007). New evidence on gender differences in promotion rates: An empirical analysis of a sample of new hires. *Industrial Relations: A Journal of Economy & Society, 46(3),* 511-550.

Brown, D.J., Ferris, L.D., Heller, D., & Keeping, L.M. (2007). Antecedents and consequences of the frequency of upward and downward social comparisons at work. *Organizational Behavior and Human Decision Processes, 102(1),* 59-75.

Burress, J.H., & Zucca, L.J. (2004). The gender equity gap in top corporate executive positions. *Mid-American Journal of Business, 19(1),* 55-62.

Buunk, A.P., & Gibbons, F.X. (Eds.). (1997). *Health, coping and well-being: Perspectives from social comparison theory*. Hillsdale, NJ: Erlbaum.

Buunk A.P., Cohen-Schotanus, J., & Van Nek, R.H. (2007). Why and how people engage in social comparison while learning social skills in groups. *Group Dynamics: Theory, Research, and Practice, 11,* 140-152.

Buunk, A. P., Zurriaga, R., Gonzalez-Roma, V., & Subirats, M. (2003). Engaging in upward and downward comparisons as a determinant of relative deprivation at work: A longitudinal study. *Journal of Vocational Behavior, 62,* 370-388.

Buunk, A. P., Zurriaga, R., Peiró, C.M., Nauta, A., & Gosalvez, I. (2005). Social comparisons at work as related to a cooperative social climate and to individual differences in social comparison. *Applied Psychology: An International Review, 54,* 61-80.

Buunk, A.P. & Gibbons, F.X. (2006). Social comparison orientation: A new perspective on those who do and those who don't compare with others. In: S. Guimond (Eds.), *Social comparison and social psychology: Understanding cognition, intergroup relations, and culture* (pp 15-32). New York: Cambridge University Press.

Buunk, A.P., & Gibbons, F.X. (2007). Social comparison: The end of a theory and the emergence of a field. *Organizational Behavior and Human Decision Process, 102,* 3-21.

Buunk, A..P. & Ybema, J.F. (1997). Social comparisons and occupational stress: the identifaction-contrast model. In B.P. Buunk & F.X. Gibbons (Eds.), *Health, coping and well being: Perspectives from social comparison theory* (pp. 359-388). Hillsdale, NJ: Erlbaum.

Carpenter, S. (2000). Effects of cultural tightness and collectivism on self-concept and causal attributions. *Cross-Cultural Research: The Journal of Comparative Social Science, 34(1),* 38-56.

Centers, R., & Bugental, D.E. (1966). Intrinsic and extrinsic job motivations among different segments of the working population. *Journal of Applied Psychology, 50(3),* 193-197.

Chung, T., & Mallery, P. (1999). Social comparison, individualism-collectivism, and self-esteem in China and the United States. *Current Psychology: Developmental, Learning, Personality, Social, 18(4),* 340-352.

Dæhlen, M. (2007). Job values, gender and profession: A comparative study of the transition from school to work. *Journal of Education and Work, 20(2),* 107-121.

Eddleston, K.A. (2009). The effects of social comparisons on managerial career satisfaction and turnover intentions. *The Career Development International, 14(1),* 87-110.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7,* 117–140.

Garcia, S.M., & Tor, A. (2007). Rankings, standards, and competition: Task vs. scale comparisons. *Organizational Behavior and Human Decision Processes, 102(1),* 95-108.

Garcia, S.M., Tor, A., & Gonzalez, R. (2006). Ranks and rivals: A theory of competition. *Personality and Social Psychology Bulletin, 32(7),* 970-982.

Gibbons, F. X., & Buunk, B. P. (1999). Individual differences in social comparison: The development of a scale of social comparison orientation. *Journal of Personality and Social Psychology, 76,* 129–142.

Goodman, P. (1977). Social comparison processes in organizations. In B.M. Staw & G.R. Salancik (Eds.), New directions in organizational behavior (pp. 97-132). Chicago: St. Clair Press.

Gornick, J.C. & Jacobs, J.A. (1998). Gender, the welfare state, and public employment: A comparative study of seven industrialized countries. *American Sociological Review, 63(5),* 688-710.

Gruder, C. L. (1977). Choice of comparison persons in evaluating oneself. In: J. Suls & R. Miller (Eds.), *Social comparison processes: Theoretical and empirical perspectives* (pp 21-41). Washington, DC: Hemisphere.

Halbesleben, J.R.B., & Buckley, R.M. (2006). Social comparison and burnout: The role of relative burnout and received social support. *Anxiety, Stress & Coping: An International Journal, 19(3),* 259-278.

Harris, M.M., Anseel, F., & Lievens, F. (2008). Keeping up with the Joneses: A field study of the relationships among upward, lateral, and downward comparisons and pay level satisfaction. *Journal of Applied Psychology, 93(3),* 665-673.

Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Beverly Hills, CA: Sage.

Hofstede, G. (2000). Masculine and feminine cultures. In: A.E. Kazdin (Eds.), *Encyclopedia of psychology (Vol. 5; pp. 115-118).* Washington, DC: American Psychological Association.

Hofstede, G. & Hofstede, G.J. (2007). *Allemaal andersdenkenden/Different ways of thinking*. Amsterdam: Contact.

Joshi, H., Makepeace, G., & Dolton, P. (2007) More or less unequal? Evidence on the pay of men and women from the British birth cohort studies. *Work & Organization, 14(1),* 37-55.

Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology, 73(1),* 91-103.

Mandel, H., & Semyonov, M. (2006). A Welfare State paradox: State interventions and women's employment opportunities in 22 countries. *American Journal of Sociology, 111(6),* 1910-1949.

Mano-Negrin, R. (2004). Gender inequality and employment policy in the public sector: A cross-national comparison of women managers' wages in five industrialized countries. *Administration & Society, 36(4),* 454-477.

Maume, D.J. (2006). Gender differences in taking vacation time. *Work and Occupations, 33(2),* 161-190.

Mauno, S., Kinnunen, U., & Piitulainen, S. (2005). Work-family culture in four organizations in Finland: Examining antecedents and outcomes. *Community, Work & Family, 8(2),* 115-140.

Menéndez, M., Benach, J., Muntaner, C., Amable, M., & O'Campo, P. (2007). Is precarious employment more damaging to women's health than men's? *Social Science & Medicine, 64(4),* 776-781.

Michinov, N. (2005). Social comparison, perceived control, and occupational burnout. *Applied Psychology: An International Review, 54(1),* 99-118.

Miller, C. T. (1984). Self-schemas, gender, and social comparison: A clarification of the related attributes hypothesis. *Journal of Personality and Social Psychology, 46,* 1222-1229.

Miller, R. L., & Suls, J. (1977). Affiliation preferences as a function of attitude and ability similarity. In J. Suls & R.L. Miller (Eds.), *Social comparison processes. Theoretical and empirical processes* (pp. 103-124). New York: Hemisphere.

Mohanty, S. & Mishra,P.K. (1998). Occupational stress: A comparative study of public & private sector. *Social Science International, 14(1-2),* 29-39.

Nowlin, W.A. (1982). Factors that motivate public and private sector managers: A comparison. *Public Personnel Management, 11(3),* 224-227.

Portegijs, W., Hermans, B., & Lalta, V. (2006). *Emancipatiemonitor 2006.* The Hague: Sociaal Cultureel Planbureau.

Porter, L. W, & Van Maanen, J. (1970). Task accomplishment and the management of time. In B. M. Bass (Ed.), *Managing for accomplishment.* Lexington, MA: Lexington.

Rawls, J. R., Ulrich, R. A., & Nelson, O. T. (1976). A comparison of managers entering or reentering the profit and nonprofit sectors. *Academy of Management Journal, 18,* 616-662.

Sedikides, C., Gaertner, L., & Vevea, J.L. (2005). Pancultural self-enhancement reloaded: A meta-analytic reply to Heine (2005). *Journal of Personality and Social Psychology, 89(4),* 539-551.

Singh, S. (1994). Gender differences in work values and personality characteristics among Indian executives. *Journal of Social Psychology, 134(5),* 699-700.

Solomon, E. E. (1986). Private and public sector managers: An empirical investigation of job characteristics and organizational climate. *Journal of Applied Psychology, 71,* 247-259.

Steil, J.M., & Hay, J.L. (1997). Social comparison in the workplace: A study of 60 dual-career couples. *Personality and Social Psychology Bulletin, 23(4),* 427-438.

Suls, J., & Wheeler, L. (2000). A selective history of classic and neo-social comparison theory. In: J. Suls & L. Wheeler (Eds.), *Handbook of social comparison: Theory and research* (pp. 1-23). Dordrecht, Netherlands: Kluwer Academic Publishers.

Sweeney, P.D., & McFarlin, D.B. (2005). Wage comparisons with similar and dissimilar others. *Journal of Occupational and Organizational Psychology, 78(1),* 113-131.

Taylor, S. E., & Lobel, M. (1989). Social comparison activity under threat: Downward evaluation and upward contacts. *Psychological Review, 96,* 569–575.

Tornow, W. W. (1971). The development and application of an input-outcome moderator test on the perception and reduction of inequity. *Organizational Behavior & Human Performance, 6,* 614-638

United Nations (2007/2008). *Human Development Report* (see also http://hdrstats.undp.org/indicators/279.html).

Van Oudenhoven, J.P. (2001). Do organizations reflect national cultures?: A 10-nation study. *International Journal of Intercultural Relations, 25(1),* 89-107.

Walmsley, G. L. & Zald, M. N. (1973).The Political Economy of Public Organizations. *Public Administrative Review 33,* 62-73.

White, K. & Lehman, D. R. (2005). Culture and Social Comparison Seeking: The Role of Self-Motives. *Personality and Social Psychology Bulletin, 31,* 232-242.

Wills, T. A. (1981). Downward comparison principles in social psychology. *Psychological Bulletin, 90,* 245-271.

Wood, J. V. (1989). Theory and research concerning social comparisons of personal attributes. *Psychological Bulletin, 106,* 231–248.